In the Specification

Please replace the paragraph found on page 66, lines 1-2 of the specification with the following paragraph:

 $\label{eq:Figure 4} Figures 4A \ and 4B \ show \ a \ schematic of a single stepwise sequencing cycle, using the NH_2-ddNTP \ system \ (Figure 4A) \ and the \ alpha-s-ddNTP \ system \ (Figure 4B).$

Please replace the paragraphs found on page 66, lines 18-25 of the specification with the following paragraph:

Figure 7 illustrates Figures 7A and 7B illustrate the sequencing by ligation scheme in the 5'-3' direction. Sequencing by ligation can also be implemented in the 3'-5' direction by using 5' phoshphorylated phosphorylated free ends on the array and a ligating oligonucleotide bearing a ribonucleotide cleavage system.

Figure 8 shows Figures 8A and 8B show the cleavage reaction of a PN oligonucleotide that has been ligated to a primer (Figure 8A) and the cleavage reaction of a ribonucleotide containing oligo that has been ligated to a primer (Figure 8B).